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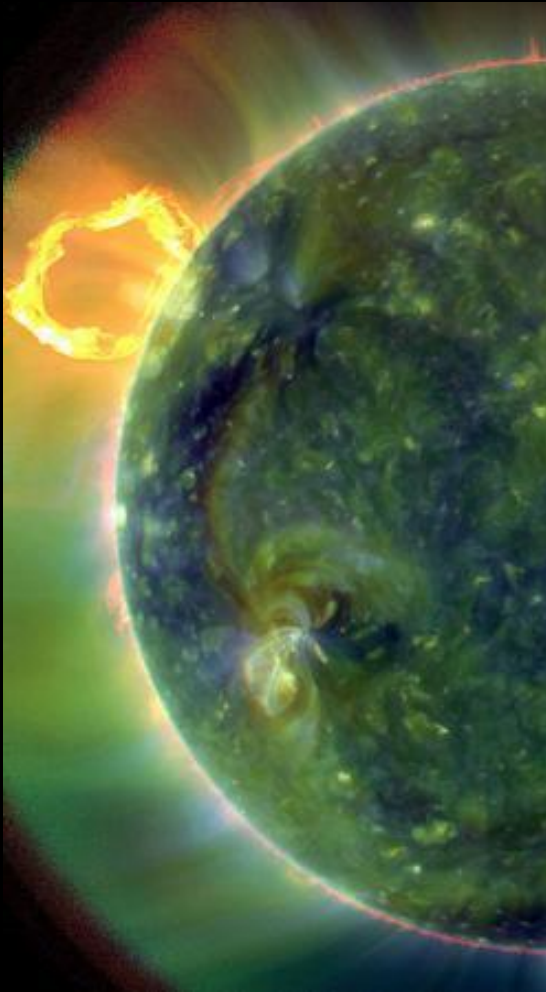
Planetary Exploration

Presented by Dr. Randii R. Wessen

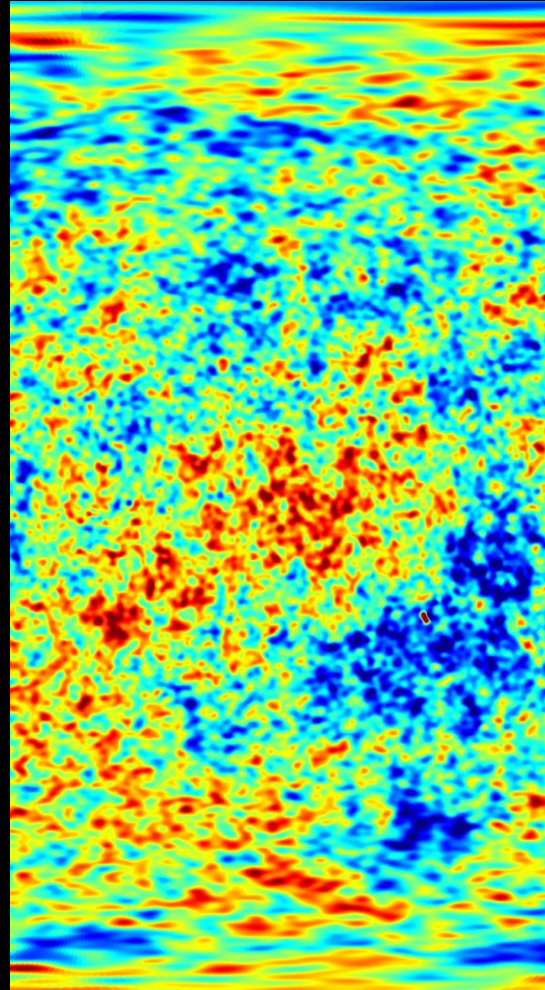
Science - Astrophysics



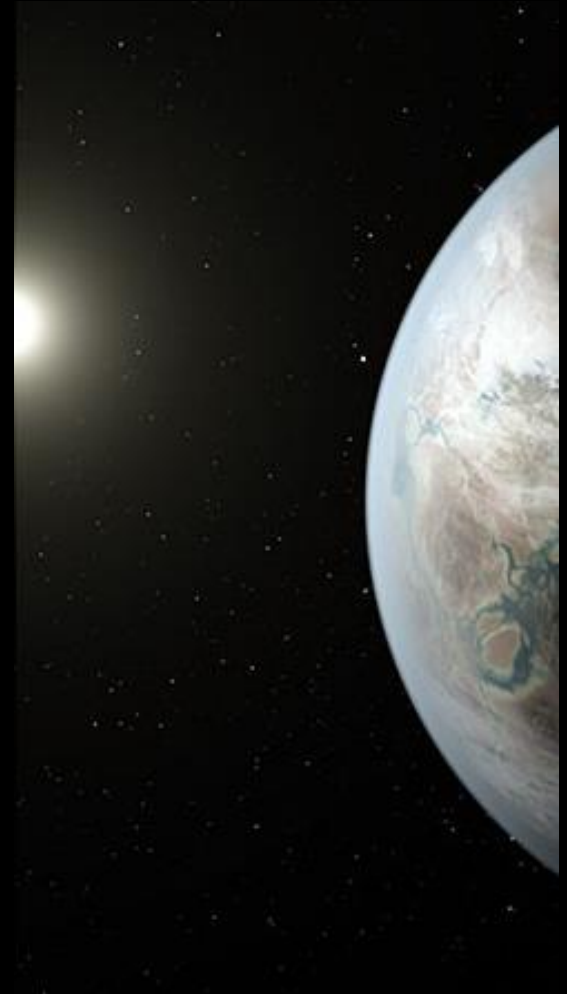
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Physics of the Cosmos



Cosmic Origins



Exoplanets

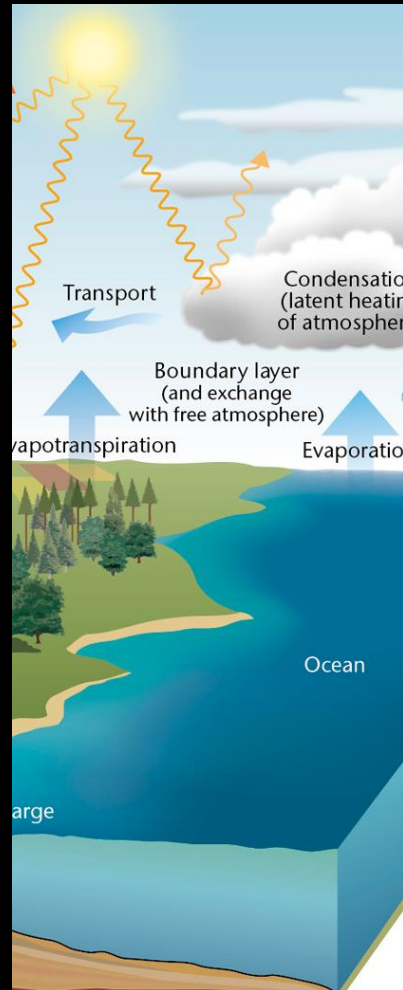
Science - Earth



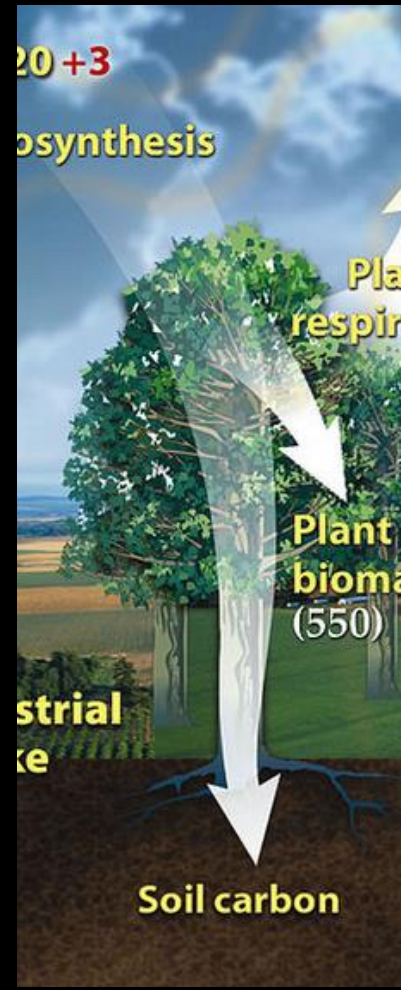
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Atmosphere/Climate



Water & Energy



Carbon Cycle



Interior

Science – Solar System



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Terrestrial



Outer Planets



Minor Bodies

Solar System Exploration



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Reconnaissance



Orbiters



Landers



Human Exploration

Mars Overview



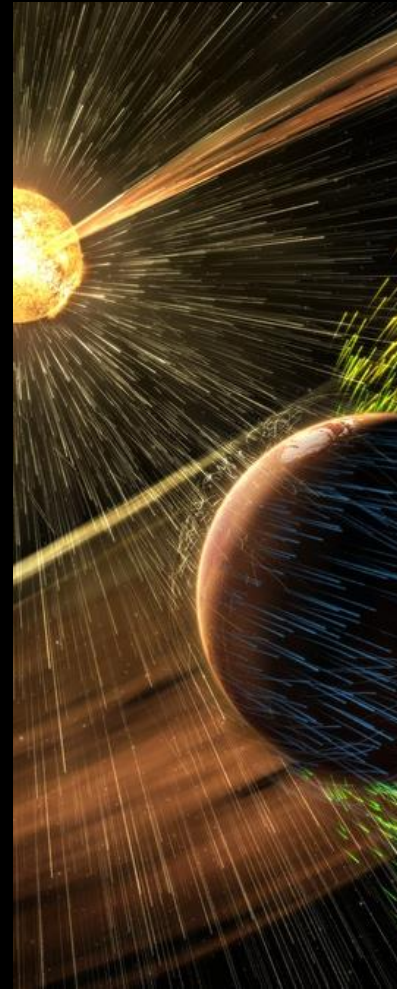
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Atmosphere



Geology



Magnetosphere

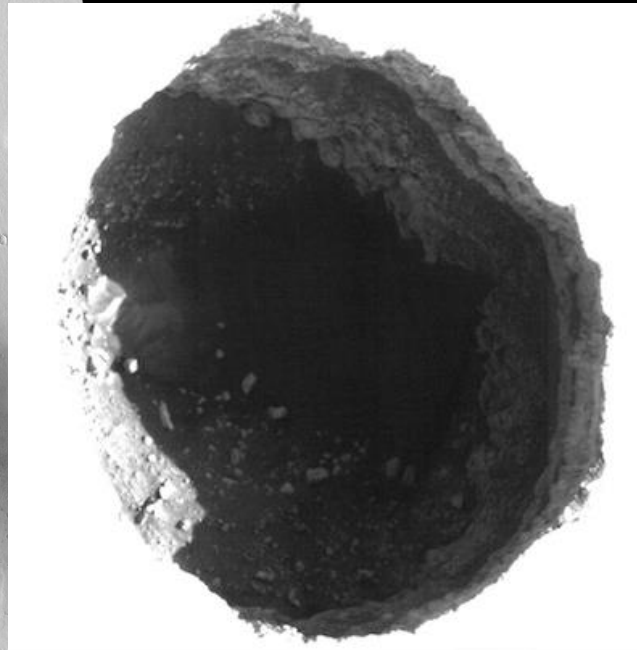
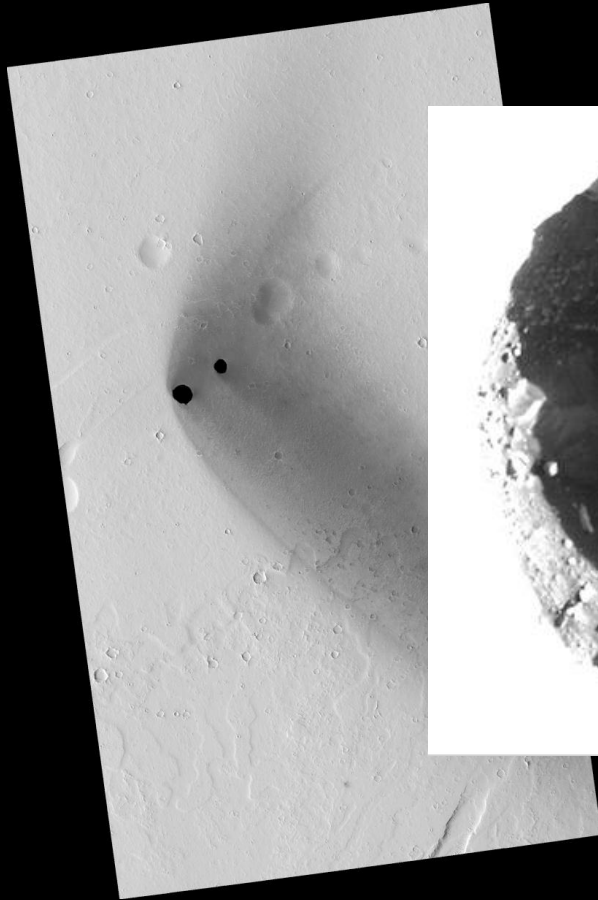


Satellites

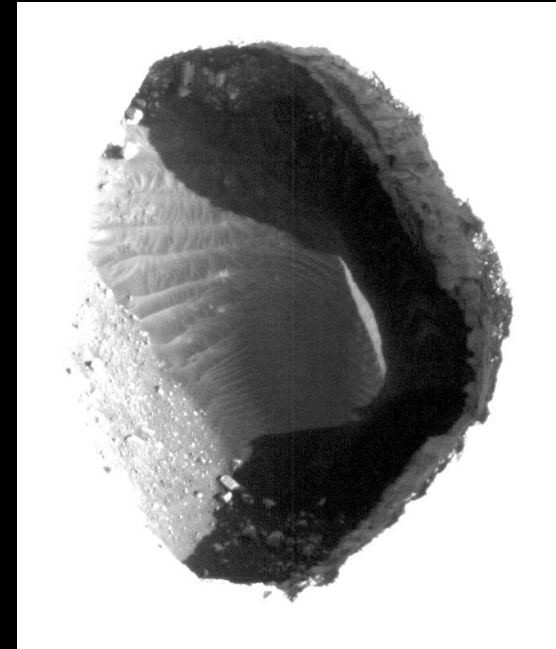
"Skylights" on Mars



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310 meters across



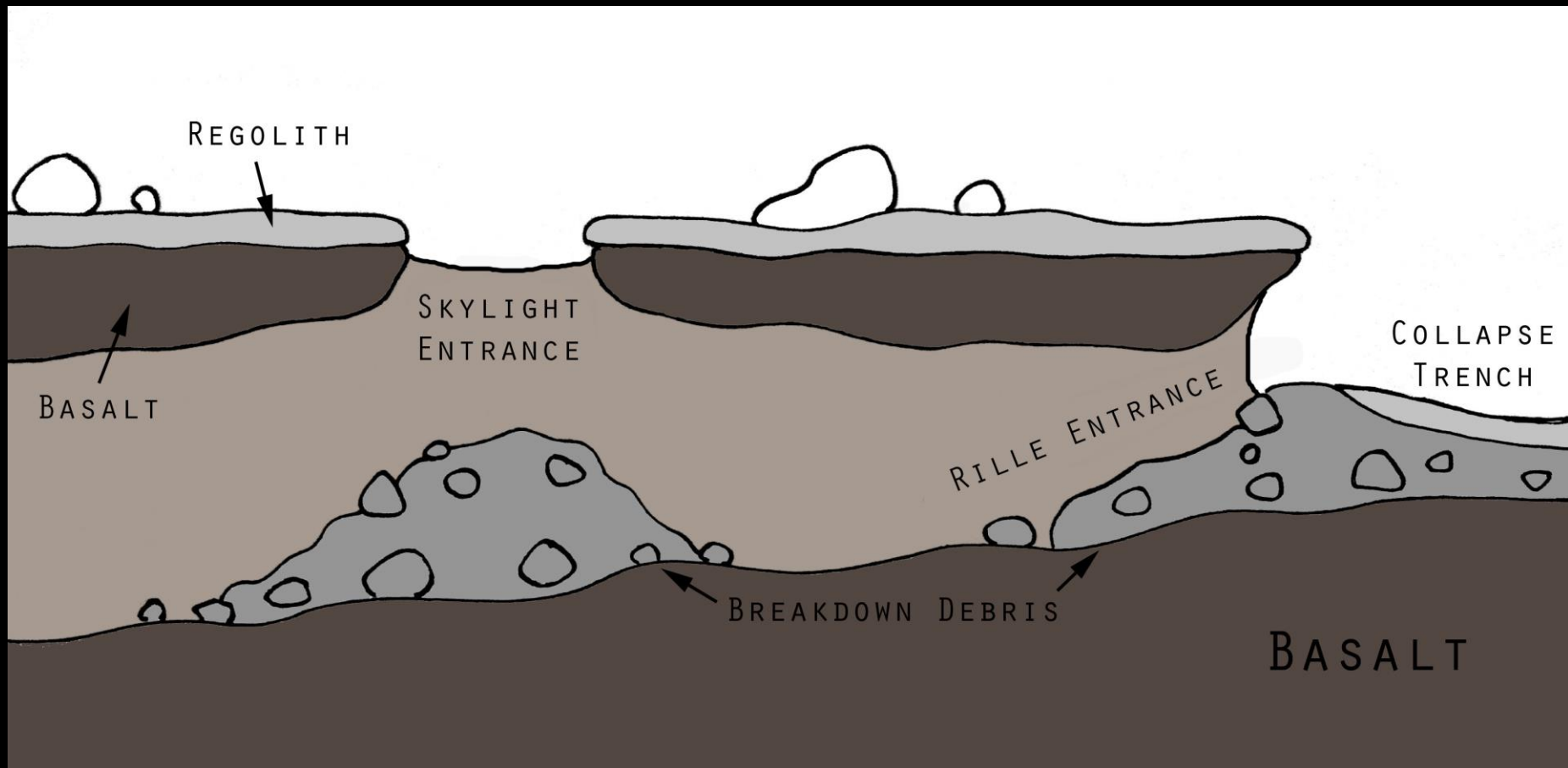
180 meters across

Northwest of Ascraeus Mons in the
Tharsis volcanic region (MRO)

Proposed "Skylight" Structure



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Mars M



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- Orbital Characteristics
 - Orbital period = 687 Earth Days
 - Sidereal period = 24 h 37 m
- Physical Characteristics
 - Radius = 0.533 Earths
 - Atmospheric pressure =
6 mbar of CO₂
 - Temperature range =
-226 °F to +95 °F
 - Surface gravity = 0.3 g
- Transit Time to Mars
 - Approximately 6 – 11 months

